

LOCKHEED MARTIN SERVICES GROUP
10101 SOUTHWEST FREEWAY, SUITE 500
HOUSTON, TEXAS 77074

MEMORANDUM

DATE: February 18, 1998
TO: Dr. Melvin Ritter, ESAT RPO, Region VI
FROM: Dr. Tom Chiang, ESAT Team Manager, Region VI
SUBJECT: CLP Data Review *J. C. H. W.*
REF: TDF # 6-8164A, ESAT File No. I2169
ESAT Contract No. 68-D6-0005

Attached is the data review summary for Case #25969
SDG #MEHL25
Site Doyle F J
Transformers

COMMENTS:

I. CONTRACTUAL ASSESSMENT OF DATA PACKAGE:

The laboratory was contractually compliant as determined by the hard copy and CCS reviews.

II. TECHNICAL/USABILITY ASSESSMENT OF DATA PACKAGE:

A total of 48 results were reviewed for this data package. The package is technically acceptable.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
HOUSTON BRANCH
10625 FALLSTONE ROAD
HOUSTON, TEXAS 77099

INORGANIC REGIONAL DATA ASSESSMENT

CASE NO. 25969 SITE Doyle F J Transformers
LABORATORY AATS NO. OF SAMPLES 2
CONTRACT # 68-D5-0141 MATRIX Water
SDG # MEHL25 REVIEWER (IF NOT ESD) ESAT
SOW# ILM04.0 REVIEWER'S NAME Linda Hoffman
ACCT # 8FAXJN27 SF # FAXU1D COMPLETION DATE February 18, 1998

SAMPLE NO.: MEH-L25 _____
MEH-L96 _____

DATA ASSESSMENT SUMMARY

	ICP	HG	CYANIDE
1. HOLDING TIMES	<u>O</u>	<u>O</u>	<u>O</u>
2. CALIBRATIONS	<u>O</u>	<u>O</u>	<u>O</u>
3. BLANKS	<u>O</u>	<u>O</u>	<u>O</u>
4. MATRIX SPIKES	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
5. DUPLICATE ANALYSIS	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
6. ICP QC	<u>O</u>		
7. FAA QC			
8. LCS	<u>O</u>	<u>N/A</u>	<u>N/A</u>
9. SAMPLE VERIFICATION	<u>O</u>	<u>O</u>	<u>O</u>
10. OTHER QC	<u>O</u>	<u>O</u>	<u>O</u>
11. OVERALL ASSESSMENT	<u>O</u>	<u>O</u>	<u>O</u>

O = Data had no problems.

M = Data qualified because of major or minor problems.

Z = Data unacceptable.

N/A = Not applicable.

ACTION ITEMS:

AREAS OF CONCERN:

NOTABLE PERFORMANCE: The laboratory submitted the data package to the Region seven days early.

COMMENTS/CLARIFICATIONS
REGION 6 CLP REVIEW

Case 25969 SDG MFHL25 Site Doyle F J Transformers Lab AATS

COMMENTS: The package consisted of data for two water samples for total metals and cyanide analyses by ILM04.0. The sampler designated the samples as field QC samples but did not indicate the type of QC samples. The RSCC personnel informed the reviewer that the samples were rinsate samples. Since the samples are field QC, laboratory QC analyses were not required. The laboratory met the 35-day turnaround time requirement. Ninety-six percent of the reported results were below the CRDL's.

The data package is technically acceptable. The technical usability of all reported results is indicated in the Data Summary Table.

An Evidence Audit was conducted for the Complete Sample Delivery Group File (CSF), and the Evidence Inventory Checklist is included as part of this report.

NOTE: THE FOLLOWING REVIEW NARRATIVE ADDRESSES BOTH CONTRACTUAL ISSUES (BASED ON THE STATEMENT OF WORK) AND TECHNICAL ISSUES (BASED ON THE NATIONAL FUNCTIONAL GUIDELINES). THE ASSESSMENT MADE FOR EACH QC PARAMETER IS SOLELY BASED ON THE TECHNICAL DATA USABILITY, WHICH MAY NOT NECESSARILY BE AFFECTED BY CONTRACTUAL PROBLEMS.

1. **Holding Times:** Acceptable. Contractual and technical holding times and sample preservation criteria were met.
2. **Calibrations:** Acceptable. All calibrations met contractual requirements. The CRDL standard results indicated that instrument performance near the CRDL's was acceptable.
3. **Blanks:** Acceptable. Preparation and calibration blanks met contractual requirements although the laboratory reported 12 analytes in the blanks. Preparation blank concentrations affected the following results above the CRDL's as indicated.

•Zinc in sample MFH-L25 is considered undetected.

•Lead in sample MFH-L96 is considered biased high.

Rinsates: Rinsate sample MFH-L25 contained zinc above the CRDL and eight other analytes at concentrations below the CRDL's. The sodium and zinc concentrations in sample MFH-L25 were due to preparation blank concentrations of these analytes. Rinsate sample MFH-L96 contained lead at a concentration above the CRDL (2.4X) and 10 other analyte concentrations below the CRDL's. The aluminum, arsenic, calcium, and zinc concentrations in sample MFH-L96 were due to calibration or preparation blank concentrations of these

INORGANIC QA REVIEW
CONTINUATION PAGE

Case 25969 SDG MFHL25 Site Doyle F J Transformers Lab AATS

3. Blanks, continued:

analytes. ESAT does not have information identifying the samples associated with the rinsate samples, so no evaluation for potential effects can be performed.

4. Pre-digestion/Pre-distillation Matrix Spike Recovery: Not Applicable.

5. Duplicate Analysis: Not Applicable.

6. ICP Quality Control:

Serial Dilution: Not Applicable.

Interference Check Sample: Acceptable. Acceptable ICS results indicated satisfactory interelement and background correction.

Coefficient of Variation: Acceptable. Replicate ICP readings were consistent.

7. Furnace Atomic Absorption Quality Control: Not Applicable.

8. Laboratory Control Sample: Acceptable. Acceptable LCS results indicated satisfactory sample preparation and analysis.

9. Sample Verification: The reviewer detected a minor reporting error, and the laboratory was contacted for correction (see FAX Record Log).

The laboratory analyzed the two samples in this SDG on different ICP's. Therefore, the reported IDL's may be different for the same analyte.

10. Other QC: Not Applicable.

11. Overall Assessment: The data package is technically acceptable.

INORGANIC DATA QUALIFIER DEFINITIONS

The following definitions provide brief explanations of the ESAT-Region 6 qualifiers assigned to results in the inorganic data review process.

- U Undetected at the laboratory reported detection limit (IDL).
- L Reported concentration is between the IDL and the CRDL.
- J Result is estimated because of outlying quality control parameters such as matrix spike, serial dilution, FAA spike recovery, etc.
- R Result is unusable.
- F A possibility of a false negative exists.
- UC Reported concentration should be used as a raised detection limit because of apparent blank contamination.
- ^ High bias. Actual concentration may be lower than the concentration reported.
- v Low bias. Actual concentration may be higher than the concentration reported.

DATA SUMMARY

Case No.: 25969

SDG. No.: MFHL25

Reviewer: L. Hoffman

Laboratory: AATS

Matrix: WATER

Units: ug/L


EPA TR #=>	FLAG	FLAG	FLAG	FLAG	FLAG	COMMENTS
	MFH-L25	MFH-L96				
ALUMINUM	9.5 LJv	22.3 LUC				
ANTIMONY	3.0 U	4.6 LUC				
ARSENIC	3.0 U	3.0 U				
BARIUM	1.0 U	1.1 L				
BERYLLIUM	1.0 U	1.0 U				
CADMIUM	1.0 U	1.0 U				
CALCIUM	153 L	70.2 LUC				
CHROMIUM	1.5 L	1.0 U				
COBALT	1.2 L	1.0 U				
COPPER	2.0 U	1.0 U				
IRON	54.8 L	7.3 LJv				
LEAD	2.0 U	7.1 J^				
MAGNESIUM	70.0 U	17.9 L				
MANGANESE	1.6 L	1.3 L				
MERCURY	0.10 U	0.10 U				
NICKEL	2.7 L	1.0 U				
POTASSIUM	33.0 U	56.1 LJv				
SELENIUM	5.0 U	4.0 U				
SILVER	2.0 U	1.0 U				
SODIUM	296 LUC	133 L				
THALLIUM	4.0 U	4.0 U				
VANADIUM	1.0 U	1.0 U				
ZINC	24.4 UC	11.0 LUC				
CYANIDE	1.0 U	1.0 U				

INORGANIC/ORGANIC COMPLETE SDG FILE (CSF) INVENTORY CHECKLIST

Case No. 25969 SDG No. MFHL25 SDG Nos. To Follow _____ SAS No. _____ Date Rec 02/12/98

EPA Lab ID: <u>AATS</u> Lab Location: <u>Broken Arrow, OK</u> Region: <u>6</u> Audit No.: <u>25969/MFHL25</u> Re_Submitted CSF? Yes _____ No <u>X</u> Box No(s): <u>1</u> COMMENTS: 3. The laboratory made a few page number errors that the reviewer corrected.	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">ORIGINALS</th> <th style="text-align: center;">YES</th> <th style="text-align: center;">NO</th> <th style="text-align: center;">N/A</th> </tr> </thead> <tbody> <tr> <td>CUSTODY SEALS</td> <td></td> <td></td> <td></td> </tr> <tr> <td>1. Present on package?</td> <td style="text-align: center;">X</td> <td></td> <td></td> </tr> <tr> <td>2. Intact upon receipt?</td> <td style="text-align: center;">X</td> <td></td> <td></td> </tr> <tr> <td>FORM DC-2</td> <td></td> <td></td> <td></td> </tr> <tr> <td>3. Numbering scheme accurate?</td> <td></td> <td style="text-align: center;">X</td> <td></td> </tr> <tr> <td>4. Are enclosed documents listed?</td> <td style="text-align: center;">X</td> <td></td> <td></td> </tr> <tr> <td>5. Are listed documents enclosed?</td> <td style="text-align: center;">X</td> <td></td> <td></td> </tr> <tr> <td>FORM DC-1</td> <td></td> <td></td> <td></td> </tr> <tr> <td>6. Present?</td> <td style="text-align: center;">X</td> <td></td> <td></td> </tr> <tr> <td>7. Complete?</td> <td style="text-align: center;">X</td> <td></td> <td></td> </tr> <tr> <td>8. Accurate?</td> <td style="text-align: center;">X</td> <td></td> <td></td> </tr> <tr> <td>CHAIN-OF-CUSTODY RECORD(s)</td> <td></td> <td></td> <td></td> </tr> <tr> <td>9. Signed?</td> <td style="text-align: center;">X</td> <td></td> <td></td> </tr> <tr> <td>10. Dated?</td> <td style="text-align: center;">X</td> <td></td> <td></td> </tr> <tr> <td>TRAFFIC REPORT(s) PACKING LIST(s)</td> <td></td> <td></td> <td></td> </tr> <tr> <td>11. Signed?</td> <td style="text-align: center;">X</td> <td></td> <td></td> </tr> <tr> <td>12. Dated?</td> <td style="text-align: center;">X</td> <td></td> <td></td> </tr> <tr> <td>AIRBILLS/AIRBILL STICKER</td> <td></td> <td></td> <td></td> </tr> <tr> <td>13. Present?</td> <td style="text-align: center;">X</td> <td></td> <td></td> </tr> <tr> <td>14. Signed?</td> <td style="text-align: center;">X</td> <td></td> <td></td> </tr> <tr> <td>15. Dated?</td> <td style="text-align: center;">X</td> <td></td> <td></td> </tr> <tr> <td>SAMPLE TAGS</td> <td></td> <td></td> <td></td> </tr> <tr> <td>16. Does DC-1 list tags as being included?</td> <td style="text-align: center;">X</td> <td></td> <td></td> </tr> <tr> <td>17. Present?</td> <td style="text-align: center;">X</td> <td></td> <td></td> </tr> <tr> <td>OTHER DOCUMENTS</td> <td></td> <td></td> <td></td> </tr> <tr> <td>18. Complete?</td> <td style="text-align: center;">X</td> <td></td> <td></td> </tr> <tr> <td>19. Legible?</td> <td style="text-align: center;">X</td> <td></td> <td></td> </tr> <tr> <td>20. Original?</td> <td style="text-align: center;">X</td> <td></td> <td></td> </tr> <tr> <td>20a. If "NO", does the copy indicate where original documents are located?</td> <td></td> <td></td> <td style="text-align: center;">X</td> </tr> </tbody> </table>	ORIGINALS	YES	NO	N/A	CUSTODY SEALS				1. Present on package?	X			2. Intact upon receipt?	X			FORM DC-2				3. Numbering scheme accurate?		X		4. Are enclosed documents listed?	X			5. Are listed documents enclosed?	X			FORM DC-1				6. Present?	X			7. Complete?	X			8. Accurate?	X			CHAIN-OF-CUSTODY RECORD(s)				9. Signed?	X			10. Dated?	X			TRAFFIC REPORT(s) PACKING LIST(s)				11. Signed?	X			12. Dated?	X			AIRBILLS/AIRBILL STICKER				13. Present?	X			14. Signed?	X			15. Dated?	X			SAMPLE TAGS				16. Does DC-1 list tags as being included?	X			17. Present?	X			OTHER DOCUMENTS				18. Complete?	X			19. Legible?	X			20. Original?	X			20a. If "NO", does the copy indicate where original documents are located?			X
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Over for additional comments.

Audited by: 
 Audited by: _____
 Audited by: _____

Signature

Linda Hoffman /ESAT Data Reviewer

Printed Name/Title

Date 02/16/98

Date _____

Date _____

TO BE COMPLETED BY CEAT

Date Recvd by CEAT: _____ Date Entered: _____ Date Reviewed: _____

Entered by: _____

Reviewed by: _____

Signature

Printed Name/Title

In Reference to
Case 25969/SDG MFHL25
Page 1 of 1 page
ESAT File No.: I2169

**Contract Laboratory Program
REGIONAL/LABORATORY COMMUNICATION SYSTEM**

FAX Record Log

Date of FAX: February 18, 1998

Laboratory Name: AATS

Lab Contact: Jason Ruckman

Region: 6

Regional Contact: Linda Hoffman (ESAT)

FAX Initiated by: Region

In reference to data for the following sample number(s):

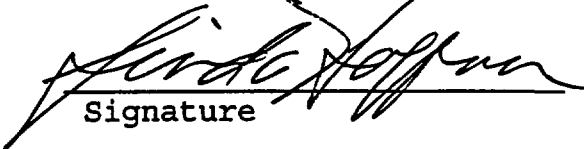
All samples in this SDG.

Summary of Questions/Issues:

1. The cooler temperature was not recorded on the case narrative (ILM04.0, Exhibit A, Task I, A-6, last paragraph of #5). Please acknowledge and note for the future.
2. On page 94 of the raw data, the EPA sample number should be "S0", not "S". Please correct and resubmit page 94.
3. On pages 125 and 126 of the cyanide raw data has an S5 standard but Form 14 (p. 42) has an S20 standard. If this discrepancy was not corrected in response to CCS, please correct and resubmit Form 14.

The EPA expects the laboratory to look into the above items and submit the data within 7 days to:

Attn: Mahmoud El-Feky - U.S. EPA
10625 Fallstone Road
Houston, TX 77099


Signature

02/18/98
Date

Distribution: (1) Lab Copy, (2) Region Copy